

CLAIMS

What is claimed is:

- 5 1. A chip type semiconductor device comprising:
an insulating substrate;
first and second conductive land areas which are formed
on said insulating substrate and which are electrically coupled
with each other;
10 a conductive post formed on said first conductive land
area;
a semiconductor pellet which has electrodes on both
sides thereof and which is mounted on said second conductive
land area, said electrode on one side of said semiconductor
15 pellet being coupled onto said second conductive land area and
said electrode on the other side of said semiconductor pellet
having an external electrode electrically coupled thereto; and
encapsulation resin portion which encapsulates a main
area of said insulating substrate including said conductive post
20 and said semiconductor pellet, wherein top portions of said
conductive post and said external electrode electrically coupled
to said semiconductor pellet being exposed from said
encapsulation resin portion.
- 25 2. A chip type semiconductor device as set forth in claim 1,
wherein said conductive post and said external electrode
electrically coupled to said semiconductor pellet are disposed
such that top surfaces of said conductive post and said external
electrode become approximately coplanar with each other.

3. A chip type semiconductor device as set forth in claim 1, wherein said conductive post is a column shaped conductive block member.
- 5 4. A chip type semiconductor device as set forth in claim 3, wherein said column shaped conductive block member is coupled to said first conductive land area via conductive adhesive.
- 10 5. A chip type semiconductor device as set forth in claim 3, wherein said column shaped conductive block member is coupled to said first conductive land area by using ultrasonic bonding.
- 15 6. A chip type semiconductor device as set forth in claim 1, wherein said conductive post comprises a conductive member which is formed by plating.
- 20 7. A chip type semiconductor device as set forth in claim 1, wherein said conductive post comprises a conductive member which is formed by using conductive adhesive.
- 25 8. A chip type semiconductor device as set forth in claim 1, wherein said first and second conductive land areas are formed by a common conductive land portion which is partitioned by a resist film into said first and second conductive land areas.
- 30 9. A chip type semiconductor device as set forth in claim 1, wherein said external electrode electrically coupled with said semiconductor pellet is a flat board shaped conductive member

joined onto said electrode of said semiconductor pellet.

10. A chip type semiconductor device as set forth in claim 1,
wherein said external electrode electrically coupled with said
5 semiconductor pellet is a hemispherical conductive member
joined onto said electrode of said semiconductor pellet.

11. A chip type semiconductor device as set forth in claim 1,
wherein said second conductive land area has a concave portion
10 in which said semiconductor pellet is mounted.

12. A method of manufacturing a chip type semiconductor
device comprising:

preparing an insulating substrate;

15 forming first and second conductive land areas on said
insulating substrate, said first and second conductive land
areas being electrically coupled with each other;

forming a conductive post on said first conductive land
area;

20 mounting a semiconductor pellet which has electrodes on
both sides thereof on said second conductive land area, said
electrode on one side of said semiconductor pellet being coupled
onto said second conductive land area and said electrode on the
other side of said semiconductor pellet having an external
25 electrode electrically coupled thereto; and

encapsulating a main area of said insulating substrate
including said conductive post and said semiconductor pellet
with an encapsulation resin portion, wherein top portions of
said conductive post and said external electrode electrically
30 coupled to said semiconductor pellet being exposed from said

encapsulation resin portion.

13. A method of manufacturing a chip type semiconductor device as set forth in claim 12, wherein said conductive post
5 and said external electrode electrically coupled to said semiconductor pellet are disposed such that top surfaces of said conductive post and said external electrode become approximately coplanar with each other.
- 10 14. A method of manufacturing a chip type semiconductor device as set forth in claim 12, wherein said conductive post is a column shaped conductive block member and, in said forming a conductive post on said first conductive land area, said column
15 shaped conductive block member is coupled to said first conductive land area via conductive adhesive.
- 15 15. A method of manufacturing a chip type semiconductor device as set forth in claim 12, wherein said conductive post is a column shaped conductive block member and, in said forming a
20 conductive post on said first conductive land area, said column shaped conductive block member is coupled to said first conductive land area by using ultrasonic bonding.
- 25 16. A method of manufacturing a chip type semiconductor device as set forth in claim 12, wherein said conductive post is formed by plating.
- 30 17. A method of manufacturing a chip type semiconductor device as set forth in claim 12, wherein said conductive post is formed by using conductive adhesive.

18. A method of manufacturing a chip type semiconductor device as set forth in claim 12, wherein said first and second conductive land areas are formed by a common conductive land
5 portion which is partitioned by a resist film into said first and second conductive land areas.

19. A method of manufacturing a chip type semiconductor device as set forth in claim 12, wherein said external electrode
10 electrically coupled with said semiconductor pellet is a flat board shaped conductive member joined onto said electrode of said semiconductor pellet.

20. A method of manufacturing a chip type semiconductor
15 device as set forth in claim 12, wherein said second conductive land area has a concave portion and, in said mounting a semiconductor pellet which has electrodes on both sides thereof on said second conductive land area, said semiconductor pellet is mounted on said concave portion.